

UNIVERSITY OF MINNESOTA
THE MEDICAL SCHOOL
MINNEAPOLIS 14

DEPARTMENT OF BACTERIOLOGY
AND IMMUNOLOGY

March 12, 1957

Proddy

Dear Josh:

I have intended to write you sooner about the Hungarian article
HORVÁTH, J., MARTON, M and OROSZLÁN, I. (1954)

Vegetative Hybridisation *in* *Streptomyces*.

Acta Microbiologica Acad. Sci. Hungaricae. II: 21-37.

The article apparently is based on the work of
Kalina (1952) which is in Russian. *S. globosus* is
used. Vegetative hybridisation means transformation
à la *Pneumococci* but the paper does not support it.
In fact the title becomes Transformation attempts
in the Streptomyces. Horvath does quite a bit
on the stability of the two strains - like much of
the work in this country. The interesting part is
that one strain is grown in the filtrate of
another strain (the mycelium is ground with
sand and sterilized by filtration). After
a dozen passages, the original strain
changes. Its pigment, antibiotic and other
characteristics are said to become more
like that of the strain yielding the
filtrate — hence transformation.

I need not discuss the alternatives with
you — selection, adaptation and contamination.
There may be some transformation but there
is not any evidence strongly presented.

The "transformed" strain is then quite stable - ruling out adaptation. The statement is made that the transformation goes rapidly once started - i.e. in the 11th passage the streptomycete is like its ancestor but in the 12th passage in the filtrate, the streptomycete converts immediately to the new type and is stable. Unquestionably this is interesting but in this paper was carried no further.

Howarth wrote for a reprint recently so I intend to write him about any current work or extensions of this publication.

Everything progresses normally here. With spring approaching we are beginning to think about some tree planting (evergreens). Last fall we planted some deciduous trees - I hope they survived the winter.

Best wishes to you & yours.

Gaylen.

We are all fine - except for an interlude of measles which John David, Phillips & Evelyn are only now recovering from. Don had them first. Lois seems to like the Twin City almost as much as Madison.